10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Dab2 Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19696b

Product Information

Application	WB, E
Primary Accession	P98078
Other Accession	O88797, NP_001008702.1, NP_001032994.1, NP_075607.2
Reactivity	Human, Rat, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40861
Calculated MW	82312
Antigen Region	624-650

Additional Information

Gene ID	13132
Other Names	Disabled homolog 2, DOC-2, Mitogen-responsive phosphoprotein, Dab2, Doc2
Target/Specificity	This Mouse Dab2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 624-650 amino acids from the C-terminal region of mouse Dab2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Dab2 Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Dab2
Synonyms	Doc2
Function	Adapter protein that functions as a clathrin-associated sorting protein

	(CLASP) required for clathrin-mediated endocytosis of selected cargo proteins. Can bind and assemble clathrin, and binds simultaneously to phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2) and cargos containing non-phosphorylated NPXY internalization motifs, such as the LDL receptor, to recruit them to clathrin-coated pits. Can function in clathrin-mediated endocytosis independently of the AP-2 complex. Involved in endocytosis of integrin beta-1; this function seems to redundant with the AP-2 complex and seems to require DAB2 binding to endocytosis accessory EH domain-containing proteins such as EPS15, EPS15L1 and ITSN1. Involved in endocytosis of cystic fibrosis transmembrane conductance regulator/CFTR. Isoform p96 is involved in endocytosis of megalin/LRP2 lipoprotein receptor during embryonal development. Required for recycling of the TGF-beta receptor. Isoform p67 is not involved in LDL receptor endocytosis. Involved in CFTR trafficking to the late endosome. Involved in several receptor-mediated signaling pathways. Involved in TGF-beta receptor signaling and facilitates phosphorylation of the signal transducer SMAD2. Mediates TFG-beta-stimulated JNK activation. May inhibit the canoniocal Wnt/beta-catenin signaling pathway by stabilizing the beta-catenin destruction complex through a competing association with axin preventing its dephosphorylation through protein phosphatase 1 (PP1). Sequesters LRP6 towards clathrin-mediated endocytosis, leading to inhibition of Wnt/beta-catenin signaling. May activate non-canonical Wnt signaling. In cell surface growth factor/Ras signaling pathways proposed to inhibit ERK activation by interrupting the binding of GRB2 to SOS1 and to inhibit SRC by preventing its activating phosphorylation at 'Tyr-419'. Proposed to be involved in modulation of androgen receptor (AR) signaling mediated by SRC activation; seems to compete with AR for interaction with SRC. Plays a role in the CSF-1 signal transduction pathway. Plays a role in cellular differentiation. Involved in cell positioning and formation of visceral endoderm (VE) during embryogenesis and proposed to be required in the VE to respond to Nodal signaling coming from the epiblast. Required for the epithelial to mesenchymal transition, a process necessary for proper embryonic development. May be involved in myeloid cell differentiation and can induce macrophage adhesion and spreading. Isoform p67 may be involved in transcriptional regulation. May act as a tumor suppressor.
Cellular Location	Cytoplasmic vesicle, clathrin-coated vesicle membrane. Membrane, clathrin-coated pit. Note=Colocalizes with large insert-containing isoforms of MYO6 at clathrin-coated pits/vesicles During mitosis is progressively displaced from the membrane and translocated to the cytoplasm (By similarity). [Isoform p67]: Cytoplasm. Nucleus Note=Diffuse localization in the cytoplasm; does not localize to clathrin-coated pits
Tissue Location	Isoform p96 and isoform p67 are expressed in adult kidney and fibroblasts with isoform p96 being the predominant form Isoform p67 is the predominant isoform expressed in embryonic visceral endoderm.

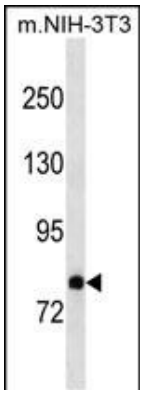
Background

Component of the CSF-1 signal transduction pathway.

References

Collaco, A., et al. J. Biol. Chem. 285(22):17177-17187(2010)
Chaudhury, A., et al. Nat. Cell Biol. 12(3):286-293(2010)
Hasumi, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 106(44):18722-18727(2009)
Jain, N., et al. J. Immunol. 183(7):4192-4196(2009)
Jiang, Y., et al. Oncogene 28(33):2999-3007(2009)

Images



Mouse Dab2 Antibody (C-term) (Cat. #AP19696b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the Mouse Dab2 antibody detected the Mouse Dab2 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.